

**REDEVELOPMENT ASSESSMENT WORK PLAN****FOR****GRIEVES WOOLEN MILL****ILO# 001091990****CONFIDENTIAL**

Site Location: Lacon, Marshall County, Illinois

LPC# 1230100009

Estimated Inspection Date:

River Sediment & Springs: January 31 & February 1, 1996

Site Soils & Groundwater: Spring, 1996

OBJECTIVE:

The long-range goal of this inspection is to determine the suitability of the Grieves Woolen Mill property for redevelopment. This will be accomplished by performing an environmental assessment of the site, thereby providing necessary information to prospective buyers/developers/lenders who may be concerned about possible liabilities associated with environmental contamination resulting from past operations at the site.

Illinois River sediment will be collected to determine the presence or absence of contaminants, types of contaminants and the approximate lateral and vertical extent of contamination. The analytical results of the sediment samples will be compared to background concentrations to determine natural concentrations of native analytes in the soil/sediment. Groundwater will be collected as it discharges from the bluffs and from the floodplain and analyzed to determine if any contaminants associated with the site have migrated to the groundwater.

DESCRIPTION OF THE SITE

Grieves Woolen Mill is located in Lacon, IL in the northeast 1/4 of Section 35, Township 30 North, Range 3 West in Marshall County. The Woolen Mill facility covers an area of approximately 300,000 square feet (7 acres). The mill is bordered on the northwest by a marina and on the north by a restaurant. Main Street, running north/south, is on the east side and separates the woolen mill property from a residential neighborhood. There

Donna V. [Signature]
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are residences and an open field to the south, and the Illinois River marks the west edge of the property.

The Illinois River forms a small bay (1700 ft long & 500 ft wide) between Sawyer Slough and the Illinois Route 17 Bridge. A marina occupies the northern third of the bay at the base of the bridge. Sawyer Slough and its associated wetlands forms the southern edge of the bay. There is a flood plain varying from around 50ft to approximately 100ft in width between the bay and the marina. The flood plain ends with a bluff rising approximately 15 to 20 feet up to the upland area of the property.

The topography of the site and surrounding area is moderately sloping to the west and southwest towards the river. The Woolen Mill property slopes towards the Illinois River. Water Street, an unimproved city road marks the edge of the upland mill area and the start of the bluff line.

The mill had several buildings associated with their operation. Many of the structures have been destroyed by nature or been demolished by the previous owners for safety reasons. The whole area is partially covered by building debris (bricks, concrete, etc), and other debris (tires, metal products, etc).

The primary sources of contamination are from the materials used in the making of the dyes, chromium and antimony for example. Excess dyes flowed down the bluffs, along the floodplain and into the river. A potential for sediment contamination is indicated by these reports of discolored river water. Other concerns are from the possible discharge of transformer oils while demolishing the buildings, dioxins from the burning of electrical wires for the copper, and pesticides found during a previous investigation.

SITE GEOLOGY

The site geology consists of Wisconsin glacial tills overlying fractured Silurian and Ordovician aged dolomites and St. Peter sandstone bedrock. Loess deposits more than 20 feet in thickness are found along the Illinois River bluffs. The direction of groundwater flow is believed to be to the west-southwest toward the Illinois River. Several springs and seeps were identified along the bluffs and on the floodplain adjacent to the site.

SITE HISTORY

The Grieves Woolen Mill was formerly known as Lacon Woolen Manufacturing Company. The name was changed sometime prior to 1899 to John Grieves and Sons Woolen Mill. It has been in operation from approx 1860 until the late 1960's. The property

changed ownership and ran for approximately 1 year and finally shut down.

At this time, the property was purchased by the Jolliff family. They utilized some of the buildings for a farm implement dealership. A portion of the property, including part of the original structure was sold to Lacon Seal Company. They make parts for diesel engines.

The property was then given to the City of Lacon on November 1, 1994. The city has a high police visibility to keep trespassers (kids) out. The City of Lacon hopes to develop this property into a marina, condominiums and shops.

The Woolen mill took raw wool and cleaned, dyed, spun and wove it into felts and other woolen products. The company made their own dyes. The dyes contained tin, antimony and chromium, among other substances. Sulfuric acid was utilized as well, and a 1000gal tank had allegedly leaked its contents into the soil.

This site does not fall under RCRA, and there are no previous violations identified with the property. An integrated Assessment was performed by the Illinois EPA personnel in April, 1995. Chromium, semivolatiles and pesticides were found in the site soils and the river sediments.

PHYSICAL HAZARDS

The primary physical hazards will deal with the sampling out on the flood plain in January/February. Cold Exposure, Slip/Trip and Fall from both slippery conditions and from contact with debris (branches and site debris) and potential cold water exposure if any river contact is made.

CHEMICAL HAZARDS

Contaminants previously identified on site include semivolatiles, pesticides and inorganics. Concentrations for the contaminants were high near the bluff/floodplain line. It is uncertain what the concentrations will be further out onto the floodplain and into the bay.

DERMAL AND RESPIRATORY PROTECTION

Level D protection (including protective gloves) will be used with air monitoring (TVA-1000) during sampling activities. Respiratory protection will increase as indicated;

0-5 units over background Level C

5-50 units over background Level B

50-500 units over background Level A

Addition protection will be provided do to potential cold exposure.

PROPOSED SAMPLING PLAN

The table lists the samples to be collected, their locations and the objective of each sample. The enclosed figure is an aerial photograph showing the location of each sample.

SEDIMENT

A maximum of eleven sediment samples (including 1-duplicate & 2-background samples) will be collected from 9 locations. Three additional TCLP samples will be collected from the deep sediment sample locations. The sample locations were chosen to represent either background conditions, areas likely to be affected by past site operations or areas of unknown history. Concentrations found in potentially effected areas will be compared to background sediment concentrations. Sample locations may be changed or eliminated by the project manager if site conditions require changes. Sediment samples will be collected using either a hand auger or GeoProbe coring devices, depending on site conditions during sampling.

Both qualitative and quantitative sampling will be conducted. At each of the three outer bay samples, a surface and 3 foot deep sample will be collected to the determine vertical extent of contamination. Two additional surface sediment samples will be collected in the bay, closer to shore. These samples will establish if potential contamination occurred in the past prior to the elevated river levels.

All sampling practices will be in accordance with established USEPA and IEPA sampling protocols and guidelines.

GROUNDWATER

Six groundwater samples (including 1-triple volume, 1-duplicate & 1 field blank) will be collected from two springs/seeps located on the floodplain/shore of the bay. The seeps discharge from the bluff or onto the floodplain directly below the site. It is believed that this groundwater will be indicative of groundwater conditions under the site. The water will be collected at the point of discharge using a peristaltic pump for all but the VOAs (collected by non aerating methods).

Concentrations found in the spring/seep groundwater will be compared to a background groundwater sample that will be collected during the soil and groundwater sampling at the site itself, later in the spring. The concentrations will also be compared to Illinois groundwater standards established by the Illinois Groundwater Protection Act.

LABORATORIES

Once the sample material has been placed in the appropriate sample containers, each container will be sealed in a plastic bag and packed in coolers of blue ice to keep the sample temperature at 4°C. To ensure safe delivery of sample coolers, Perlite will be added to pad the jars.

The samples will be sent via Federal Express to USEPA contracted laboratories. In the event that the USEPA has not returned to work and the Contract Labs are unable to analyze the samples, the coolers will be sent to IEPA laboratories. All samples will be analyzed for the full Target Compound List/Target Analyte List using the USEPA CLP Protocol Method for analyzing organic and inorganic compounds.

DECONTAMINATION

Because of the relatively small amount of samples taken, it is unlikely that any field decontamination will be required. All equipment utilized will have been properly decontaminated and sealed with aluminum prior to transport to the field. After sampling, the equipment will be returned to the IEPA warehouse and decontaminated and sealed with aluminum in accordance with IEPA established practices.

PROPOSED SAMPLE LOCATIONS GRIEVES WOOLEN MILL *Illinois River Bay*

X201 Shallow	Background Sediment sample
X202 Deep	Background Sediment sample
X203 Shallow	North end of line from west edge of marina to
X204 Deep	south bay entrance
X204-TCLP	
X205 Shallow	Center of line from west edge of marina to
X206 Deep	south bay entrance
X206-TCLP	
X207 Shallow	South end of line from west edge of marina to
X208 Deep	south bay entrance
X208-TCLP	
X209 Shallow	Duplicate samples - from half distance to shore
X210 Shallow	from line (above) & in line with center of site

X211 Shallow From half distance to shore from line (above) &
 In line with the south edge of the site

G601 Spring #1 Duplicates - taken along north or center of
G602 floodplain where spring is found

G603 Spring #2 Taken along southern end of flood plain where
 Spring is found

G604 QA/QC Field Blank

EMERGENCY INFORMATION

HOSPITAL SERVICE:

PROCTOR HOSPITAL
5409 North Knoxville Ave.
Peoria, Il

AMBULANCE SERVICE:

Lacon - Sparland Ambulance Service PHONE 309-943-4431

FIRE SERVICE:

Lacon - Sparland Fire Department PHONE 309-246-2435

POLICE SERVICE:

Lacon Police Department PHONE 309-246-2325

SHERIFF DEPARTMENT:

Marshall County PHONE 309-246-2115

TEAM ASSIGNMENTS

Ted Prescott	Project Manager
Mark Wagner	Safety Officer/Sampler
Mark Densmore	Chain of Custody
Brad Taylor	Sampler
Clarence Smith	GPS/GIS

PROPOSED FIELD WORK

Ambient Air Sampling (TVA-1000)
Sediment Sampling (surface & subsurface)
Groundwater Sampling (springs/seeps)
Perimeter Survey

Proposed Sample Locations

X 207 - shallow
X 208 - Deep
X 208 TCLP

X 211 - shallow

X 205 - shallow
X 206 - Deep
X 206 TCLP

X 209 - Duplicates
X 210 - shallow

X 203 - shallow
X 204 - Deep
X 204 TCLP

Spring 1
G-601, Duplicates
G-602

Spring 2
G-603 - Triple Volume

Field Blank
G-604

